ABSTRACT OF THE DISCLOSURE

A view transformation matrix that represents the position/attitude of an HMD is generated based on a signal that represents the position/attitude of the HMD (S602). On the other hand, landmarks and their locations are detected based on a captured picture (S604) and a calibration matrix ΔMc is generated using the detected locations of the landmarks (S605). The position/attitude of the HMD is calibrated using the view transformation matrix and calibration matrix ΔMc generated by the above processes (S606), a picture of a virtual object is generated based on external parameters that represent the position/attitude of the calibrated HMD, and a mixed reality picture is generated (S607). The generated mixed reality picture is displayed in the display section (S609).